



PRESERVATION OF

TEXTILES

ON TODAY'S AGENDA

- ▶ What are textiles?
- ▶ Mechanisms of deterioration
- ▶ Storage
- ▶ Handling
- ▶ Exhibit
- ▶ Cleaning
- ▶ Resources

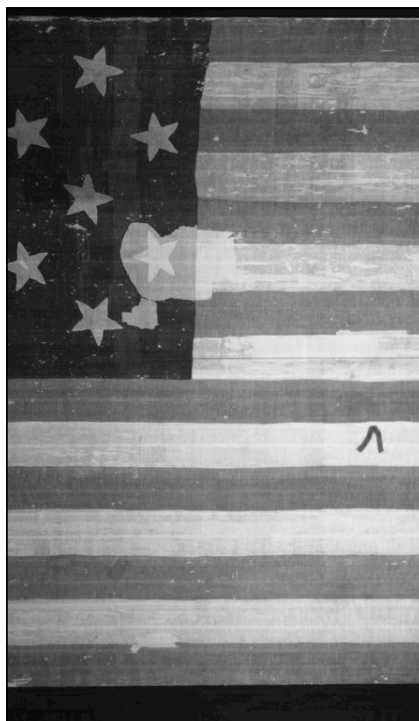


COSTUMES, SAMPLERS,
FLAGS, LINENS, QUILTS,
TENTS AND SO MUCH MORE

WHAT ARE TEXTILES?

THREE CATEGORIES OF TEXTILES

- ▶ Animal fibers
 - ▶ Wool and silk
- ▶ Natural fibers
 - ▶ Cotton and linen
- ▶ Manmade fibers
 - ▶ Completely manmade (polyester)
 - ▶ Regenerated (rayon)
- ▶ Textile collections may also contain non-textiles



THINGS FALL APART

**DETERIORATION
OF TEXTILES**

MECHANISMS OF DETERIORATION

- ▶ Oxidation
- ▶ Hydrolysis
- ▶ Cross-linking

PHYSICAL FORCES

- ▶ Textiles are easily damaged by stress
 - ▶ Tears
 - ▶ Repeated folding
 - ▶ Wear
 - ▶ Gravity



INSECT DAMAGE

- ▶ Carpet beetles
- ▶ Hide beetles
- ▶ Clothes moths



LIGHT DAMAGE

- ▶ Textiles are particularly vulnerable to fading.
- ▶ Light can also catalyze oxidation and hydrolysis of materials.
- ▶ Ultraviolet light is the most damaging to museum collections.



TEMPERATURE AND RELATIVE HUMIDITY

- ▶ High temperature accelerates chemical reactions.
- ▶ High relative humidity promotes mold growth and insect infestation.
- ▶ Low relative humidity causes loss of flexibility and desiccation.
- ▶ Fluctuations stress delicate textiles.
- ▶ Storage at a cool temperature (68-70) and 50-60% rH is recommended.



BOXES AND ROLLS
AND HANGERS, OH MY

STORAGE OF TEXTILES

FLAT STORAGE

- ▶ Best for small textiles, and extremely fragile textiles like crazy quilts.
- ▶ Use storage boxes or drawers.
- ▶ Stack sturdy textiles between sheets of unbuffered tissue.
- ▶ Avoid stacking fragile textiles.
- ▶ Store fragile textiles with a support like a sheet of archival board covered with muslin.
- ▶ Minimize folds. Pad folds with acid-free tissue.
- ▶ Extremely fragile textiles and fragments may require a mat for safe storage.



ROLLED STORAGE

- ▶ Best for quilts, rugs, blankets and tablecloths and flags
- ▶ Roll around the exterior of an appropriately sized acid-free tube.
- ▶ Roll acid-free unbuffered tissue around the tube to create a leader.
- ▶ Interleave with tissue as you roll.
- ▶ Use two people to roll large objects to maintain tension.
- ▶ Wrap in muslin to protect from dust.
- ▶ Roll quilts with top side facing out.

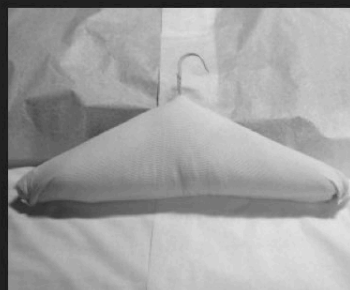


Spurlock Museum

COSTUMES

▶ Hanging storage

- ▶ Best for fitted, constructed garments in good condition.
- ▶ Do not use for fragile garments, heavy garments, or bias cut dresses.
- ▶ Use padded hangers and dust covers.



Maryland Historical Society

COSTUMES

▶ Boxed storage

- ▶ Best for unconstructed garments (kimonos), heavy and fragile garments and men's pants.
- ▶ Use as few folds as possible.
- ▶ Pad folds with tissue to minimize stress.
- ▶ Use a muslin sling in the box to help remove garments safely.



Museum of Applied Arts and Sciences



HANDLING TEXTILES

**WEAR GLOVES WHEN
HANDLING TEXTILES.**

Nitrile is preferable to cotton.

RULES FOR HANDLING TEXTILES

- ▶ Never handle artifacts unless absolutely necessary.
- ▶ Move fragile textiles on a support.
- ▶ Know where you are going to put an object down before you pick it up.
- ▶ Remove jewelry, badges, belt buckles, etc. that could snag on delicate textiles and cause tears.
- ▶ Use two people to carry textiles when necessary.

ALWAYS TRANSPORT TEXTILES ON A SUPPORT

- ▶ Because textiles are not rigid they must be transported on a support.
- ▶ Roll flat objects around a tube for transport.
- ▶ Garments may be transported in boxes with tissue padding the folds.
- ▶ Heavy textiles with surface decorations may be fan folded into a box.
- ▶ Small textiles may be transported flat on a muslin-covered board.



EXHIBIT

**TEXTILES SHOULD NEVER BE
ON PERMANENT DISPLAY.**

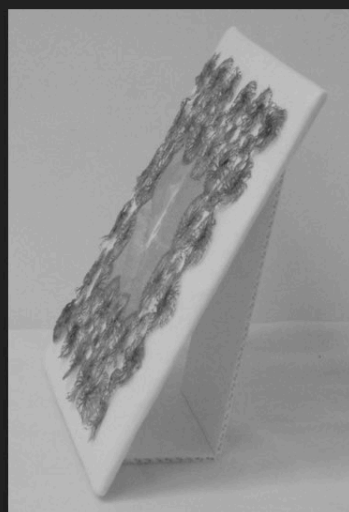
Rotate fragile textiles after 3 months. Sturdy
textiles may be displayed for 6-9 months.

CASES

- ▶ Textiles in museums should be exhibited in cases to create a microclimate.
- ▶ In house museums keep use ropes and chair cords to protect textiles from patrons.

EXHIBIT OF SMALL TEXTILES

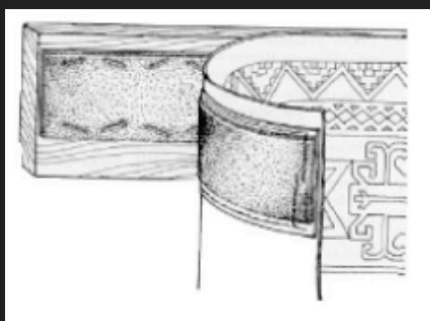
- ▶ Exhibit flat in case.
 - ▶ Lay on a padded board.
 - ▶ Textiles may be exhibited on a 15 degree angle
- ▶ Small textiles may also be exhibited framed.
 - ▶ Consult a conservator to determine the most appropriate framing method.



North Carolina Connecting to Collections

EXHIBIT OF LARGE FLAT TEXTILES

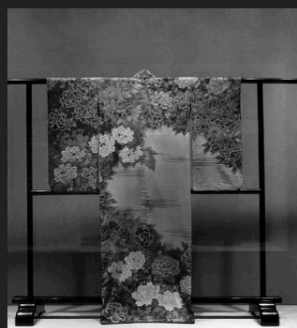
- ▶ Supports should distribute the weight of the textile.
- ▶ Appropriate supports include
 - ▶ Hook and loop tape
 - ▶ Archival tubes
 - ▶ Large slant boards
 - ▶ Frames (quite common for flags)



National Park Service Museum Handbook

EXHIBIT OF COSTUMES

- ▶ Sturdy costumes may be displayed on a mannequin
 - ▶ Ensure the mannequin supports the garment completely.
 - ▶ Do not put bias cut garments on mannequins for extended display.
- ▶ Fragile costumes may be displayed flat or on a slant board.
- ▶ Unconstructed costumes may be displayed draped over an archival tube



New York Times

TEXT

**ANY CLEANING OR CONSERVATION
OF TEXTILES SHOULD BE
PERFORMED BY A CONSERVATOR.**

<http://www.conservation-us.org/membership/find-a-conservator>

RESOURCES

- ▶ THC Museum Services Resources
 - ▶ NPS Museum Handbook
 - ▶ NPS Conserve-o-Grams
 - ▶ Canadian Conservation Institute
 - ▶ Smithsonian Conservation Institute

THANK YOU!

- ▶ Let's stay in touch!
 - ▶ rebecca@elderpreservation.com
 - ▶ www.elderpreservation.com
- ▶ THC Museum Services
 - ▶ Tricia Blakistone
 - ▶ tricia.blakistone@thc.state.tx.us
 - ▶ www.thc.texas.gov/museum-services

